ANALYSIS ERGONOMIC WORK OF A PRINTER TYPOGRAPHIC: A CASE STUDY

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Introduction:

The Health and Safety (OHS) has brought strong challenges to government agencies and employers. The Anuário Estatístico da Previdência Social (AEPS) brings numbers of the order of 717 911 work accidents. Of this total, the typical accidents express 77.32%; the route accidents, 19.96%; and occupational diseases, 2.72%, only in 2013, in Brazil (AEPS, 2014). Problems with regard to occupational health generate costs that inhibit the remuneration for capital of the organization and create diseases for loss of respiratory capacity, fractures, injuries, burns, loss of vision, cardiovascular diseases and musculoskeletal injuries. Thus, this study aimed to detect the main problems related to postural factors in University Press (UP) the Federal University of Santa Catarina – UFSC, specifically the case of typographic printing.

Method:

The methodological approach adopted in the research was Ergonomic Work Analysis (EWA), which according to Guérin et al., (2001); is structured in five stages, as shown in Figure 1.

![Figure 1 - General structure of the methodological procedures](source-prepared-by-the-authors)
Results:

In this study there was the perception of problems of evidence in relation to movements of the human body, observed in the workplace workers studied (Sector Typographic Printing). The ergonomic analysis in letterpress printing stage took place, because it is one of the main activities within the company and require a high degree of attention and visual acuity. It was observed that this process is a repetitive character of activity that may lead to the emergence of occupational diseases related to Repetitive Strain Injury (RSI) and Work-Related Musculoskeletal Disorders (MSDs). The analysis of the work of typographical printers demonstrated an important physical requirement that may be associated with the presence of RSI and WMSD and complaints of physical fatigue worker. In the diagnosis made, there was the presence of a set of possible factors associated with work-related diseases, such as, upper limbs: inadequate postures; previous trunk flexion, neck and head due to the machine's height; movements: repeatability with extension / flexion without the armrests; radial deviation / ulnar wrist, wrist extension, shoulder rotation. There is also a physical force expensive of the upper limbs in symmetrical movements needing balance while they perform the asymmetric movements, which requires attention and constant surveillance at work; and, lower limbs: the muscle work is static which causes in the muscles requested a painful fatigue, which can also lead the appearance of wear injuries to joints, intervertebral discs and tendons. Of the observations and analysis of the problems identified in the printing sector, some recommendations were made and may assist in the work making it more comfortable to reviewers. Problem 1 - existence of overloads with repeatability of movements and incorrect postures - the proposal indicates a change of procedures in the fulfillment of tasks and workload, and during this period should be included activities focused on gymnastics. Problem 2 - no pauses - there was a need to implement formal pauses so that there is interruption of the overload as the repeatability of movement.

Discussion:

Therefore sought to changes, some problems that could not be removed can be minimized, which already becomes laudable and commendable. These factors can create intervention limits, and these in work situations should check the impact on individuals and the work environment. Therefore, training a policy is needed within the organization and an ergonomic study of awareness on the environment and jobs.

Keywords: Ergonomics Labour; Typographic printing; Ergonomic Analysis.

References:
